

### DETAILED ACTION

1. Claims 1-20 are pending and are allowed. Applicants are thanked for their many efforts to bring the application into condition for allowance in a timely manner.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone and email interviews with Angela M. Brunetti on 11/5/2009, 11/7/2009 and 11/8/2009.

4. The application has been amended as follows:

#### **Claim 1:**

**insert** after "vehicle" in line 2:

--, particularly operating in at least one period of intentionally induced oversteer –

**Delete** [an] after 'near' in line 11, and **insert** in its place,

--a driver--

**Delete** [by comparing] after 'angle,' in line 14, and **insert** in its place,

--based on the difference between--

**Insert**

--driver—after 'said' in line 14;

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**Delete** [with] after the first occurrence of 'vehicle path' in line 15 and **insert** in its place

--and--

**Insert** --driver-- after 'near said' in line 15.

**Insert** after "wheel angle" in line 16:

--when the difference is less than a second predetermined threshold--

**Insert** after "wheel angle" in line 17:

--when the difference is more than a second predetermined threshold--

**Claim 10:**

**insert** after "therein" in line 2:

--the vehicle computer model being operated with at least one occurrence of intentionally induced oversteer, --

**Delete** [an] after 'near' in line 9, and **insert** in its place,

--a driver--

**Delete** [by comparing] after 'angle,' in line 12, and **insert** in its place,

--based on the difference between--

**Insert**

--driver—after 'said' in line 12;

**Delete** [with] after the first occurrence of 'vehicle path' in line 13 and **insert** in its place

--and--

**Insert** --driver-- after 'near said' in line 13.

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**Insert** after the first occurrence of “angle” in line 15:

--when the difference is less than a second predetermined threshold—

**Insert** after “wheel angle” in line 15:

--when the difference is more than a second predetermined threshold--

**Claim 19:**

**insert** after “therein” in line 2:

--the vehicle computer model being operated with at least one occurrence of intentionally induced oversteer, --

**Delete** [an] after ‘near’ in line 7, and **insert** in its place,

--a driver--

**Delete** [by comparing] after ‘computer model,’ in line 16, and **insert**

in its place,

--based on the difference between--

**Insert**

--driver—after ‘said’ in line 16;

**Insert**

--driver—after ‘said’ in line 17;

**Insert** after “angle” in line 18:

--when the difference is less than a second predetermined threshold--

**Insert** after “angle” in line 19:

--when the difference is more than a second predetermined threshold—

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5. The following changes to the drawings have been approved by the examiner and agreed upon by applicant: **please see attached amendment to figures 5, 7**. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

***Allowable Subject Matter***

6. Claims 1-3, 7-12, 16-29 are allowed.

7. The following is an examiner's statement of reasons for allowance.

Applicants provided arguments in response to a request during the interview:

Appellants have argued that the cited references do not teach or disclose the following steps of independent claims 1, 10 and 19, with reference to Figure 5:

when said rear side slip angle is determined to be greater than a predetermined threshold, determine a look ahead scale factor and increase the distance of a look ahead point substantially on or near [[an]] a driver intended vehicle path as a function of said look ahead scale factor;  
determine a new steering wheel angle, which is input to said vehicle computer model at a time later than said initial steering wheel angle, by comparing said driver intended vehicle path with said look ahead point on or near said driver intended vehicle path

Appellants assert that the driver intended path will allow for the application to collect meaningful simulation data during aggressive driving maneuvers, such as oversteer in the present application. The driver intended path may or may not follow the road or the road curvature.

In the Sharp reference, the model is directed to three known steering control situations and does not disclose path information at all. In the Peng reference, road curvature is known and the known road curvature path is used in calculating the look-ahead scale factor. However, the Peng reference does not teach or disclose a driver intended vehicle path as claimed in the present invention.

The Peng reference teaches actual, known, path information, which is known road curvature information, and is either obtained by measuring the road geometry or is obtained from transportations agencies and retrieved from an on-board database. The road curvature information is information directed to the road itself and not the vehicle or driver parameters. The information used in Peng is from GPS, map data, etc. It is respectfully asserted that the known road curvature path taught in Peng is significantly different than the driver intended vehicle path taught and

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claimed in the present invention. The driver intended path claimed in the present invention is not based on known road curvature data. The driver intended path in the claimed invention may or may not follow a known road. The driver intended path associated with the present invention may veer from the known road, or it may be along a path with no known road information. Furthermore, the driver intended path associated with the present invention may be on a known road, yet allows the driver to follow the known road in an aggressive manner, for example one which emulates oversteer. The combined Sharp and Peng references teach following a known road curvature, and correcting steering wheel angle when the vehicle departs from the known road curvature path or a known steering control situation. Together the references clearly "avoid" oversteer, as opposed to the present invention, which purposely operates with oversteer.

8. These arguments, in view of the amendment are persuasive. The claims are directed to simulation of intentionally induced oversteering. The combination as arranged is not disclosed or suggested by the art of record.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

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preferably accompany the issue fee. Such submissions should be clearly labeled

“Comments on Statement of Reasons for Allowance.”

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hugh Jones whose telephone number is (571) 272-3781.

The examiner can normally be reached on M-F, 2-10 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hugh Jones/  
Primary Examiner, Art Unit 2128